#### **Family History and Your Health**



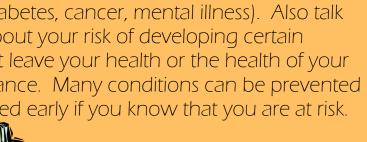
#### "My Family Health Portrait" **Learning Your Family Health History is as** easy as 1, 2, 3!

- 1. Collect health information on close family members by talking at family gatherings.
- 2. Write down your family health history and discuss it with your doctor.
- 3. Update your family health history regularly and share it with family members.

This November the U.S. Surgeon General is launching the second annual Family Health History day on Thanksgiving. This initiative encourages all American families to learn more about their family health history. A new and updated version of the tool, "My Family Health Portrait", makes it fun and easy to create a portrait of your family's health. It can be downloaded free and installed on your own computer. For more information, visit www.hhs.gov/familyhistory/.

#### A MESSAGE FROM MICHIGAN SURGEON GENERAL. DR. KIMBERLYDAWN WISDOM

While you gather with family to celebrate the holiday season, please make it a point to talk to one or more of your relatives about the health conditions that run in your family (such as diabetes, cancer, mental illness). Also talk to your doctor about your risk of developing certain conditions. Don't leave your health or the health of your loved ones to chance. Many conditions can be prevented entirely or identified early if you know that you are at risk.





For more information, please contact the Public Health Genomics Program by e-mail: genetics@michigan.gov or call toll-free: 1-866-852-1247

Michigan Department of Community Health



Diabetes is the sixth leading cause of death in Michigan. This chronic disease caused 2,620 deaths to

Michigan residents in 2003. The burden of diabetes on the health care system increases every year. Approximately 590,000 Michigan adults (18+) have been diagnosed with diabetes. Approximately 8,700 youth under the age of 18 have also been diagnosed (2002 data, Michigan Behavioral Risk Factor

diagnosed (2002 data, Michigan Behavioral Risk Factor Surveillance System).

So what is diabetes? Diabetes is a disease in which the body does not produce or properly use insulin. Insulin is a hormone needed to convert sugar and starches into energy for the body. There are two common types of diabetes. Genetic factors play a role in both.

Type 1 is also known as juvenile diabetes. This is characterized by very low or no insulin production. It is an autoimmune disorder in which a person's own antibodies destroy the cells that make insulin.

Type 2 diabetes accounts for the majority of diabetes cases. It is traditionally known as an "adult" disease but is becoming increasingly common in children. Type 2 progresses slowly whereby the body does not make the required amounts of insulin or it is not used effectively.

#### You could be at risk for Diabetes if you.....

- Have a parent or sibling diagnosed with diabetes
- \* Are overweight
- \* Get too little physical activity
- \* Have high blood pressure or high cholesterol
- \* Are of Native American, Hispanic or African American descent
- \* Have previously been diagnosed with gestational diabetes or had a baby that weighed 9 pounds or more at birth

# What can you do to lower your risk?

- \*Know your family history— Most recent studies note that someone with a family history is at least twice as likely to develop diabetes as someone without a family history. Some studies show a four times greater risk.
- \*Move more— Visit
  www.Michiganstepsup.org to find some
  tips on how.
- \*Lose Weight— If you are overweight or obese, losing just 5-7% of your body weight decreases your risk of diabetes by more than 50%!
- \*Choose a healthy diet— with 2 1/2 cups of brightly colored vegetables and 2 cups of fruit a day.
- \*Become your family's advocate— If you are currently living with diabetes, share your health history with others in your family and encourage them to make the necessary lifestyle changes to prevent or delay diabetes.

#### 

"New evidence shows that 1 in 3 Americans born in 2000 will develop diabetes sometime during their lifetime."

> -Julie Louise Gerberding, Director, Centers for Disease Control and Prevention

#### On the Web......

Michigan Diabetes Outreach Network

www.diabetesinmichigan.org

American Diabetes Association

www.diabetes.org/home.jsp

National Diabetes Education Program

www.ndep.nih.gov/

National Kidney Foundation of Michigan

www.nkfm.org/

Genetics Resource Center

www.MIGeneticsConnection.org

For more information, please contact the Public Health Genomics Program by e-mail: genetics@michigan.gov or call toll-free: 1-866-852-1247

Michigan Department of Community Health September, 2005–Vol. 2, No. 3

# **Family History and Your Health**

#### **National Cholesterol**

#### **Awareness Month**

# What is Cholesterol and What Does It Do?

High cholesterol is a risk factor for many chronic diseases, the major one being coronary artery disease (CAD). CAD is one of the most prevalent and preventable forms of heart disease. It is the leading cause of death in Michigan.

Cholesterol is essential to life. It is an important part of cell membranes and is used to make vitamins and hormones. It is made by the liver, but is also obtained through diet. Too much cholesterol can lead to a high risk for heart attack and/or stroke. Cholesterol is carried in the blood by different particles, including:

- High-density lipoprotein (HDL), called the "good" kind, because it helps to remove cholesterol from the body. Low levels of HDL can increase risk for CAD.
- Low-density lipoprotein (LDL), called the "bad" kind, because too much cholesterol and LDL in the diet can result in "clogged" arteries, also known as plaque, and can increase risk for CAD.

#### What is the Family Connection?

High cholesterol tends to run in families, so it is important to know your family history.

Anyone with an immediate family member (parent, sibling, child) who has had high cholesterol, stroke, or heart disease, especially in a man younger than 55 or in a woman under age 65, should seek medical advice from a doctor.

#### KNOW YOUR NUMBERS!

The American Heart Association recommends all adults 20 years and older have a fasting lipoprotein profile (including total cholesterol, LDL, and HDL) at least every five years.

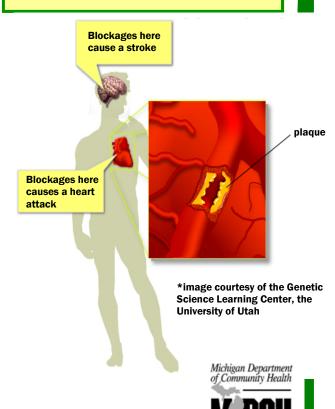
#### Total cholesterol:

**Less than 200mg/dL**.....desirable 200-239 mg/dL.....borderline high 240 mg/dL or above.....high

#### LDL Cholesterol level:

100mg/dL.....optimal/desirable 100-129mg/dL...near/above optimal 130-159mg/dL....borderline high 160-189mg/dL....high 190mg/dL or above....very high

HDL levels should be above 40 mg/dL. 60 mg/dl is recommended to help lower your risk for heart disease.



Jennifer M. Granholm, Governor Janet Olszewski, Director





# **Eat your colors!**

One important way to protect your health and reduce your risk of cancer, heart disease and other chronic diseases is to eat 5 or more servings of colorful fruits and vegetables per day. Deeply colored fruits and vegetables provide a wide range of vitamins, minerals and fiber the body needs to maintain good health and energy levels. For more information on "eating your colors" and great recipes go to

www.5aday.com



#### **2005 Dietary Guidelines**

Focus on Fruits - 2 cups per day

#### Know the limits on fat, salt and sugars—

keep your diet low in saturated fats like those found in cheese or whole milk products that tend to raise blood cholesterol, trans fats like those found in vegetable oil and shortening, salt and added sugars. Choose low fat/no fat dairy products and oils such as canola or olive oil that tend not to raise blood cholesterol and offer some protection against heart disease.

Vary your Veggies— 2— 3 cups per day

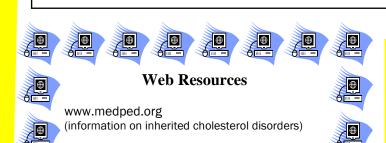
Consume Calcium rich foods— 3 cups per
day

Make half your grains whole— 3 ounces per day

Go lean with protein— vary your choice and preparation methods. Bake, broil or grill instead of frying

Go to:

www.healthierus.gov/dietaryguidleines/ to view

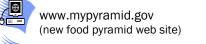


The Michigan Department of Community Health would like to remind you to:

- **Know Your Family History** 
  - **⊙ Know Your Numbers**
- © Move More, Eat Better, and Don't Smoke



www.nhlbi.nih.gov/chd/ (National Cholesterol Education Program)



www.michiganstepsup.org (Michigan Steps Up official web site)

www.MIGeneticsConnection.org

www.michigan.gov/mdch/ (Click on the prevention link and go to the cardiovascular link for further information, fact sheets and the State Cardiovascular Plan)





The patient should be made to understand that he or she must take charge of his own life. Don't take your body to the doctor as if he (the doctor's office) were a repair shop.

~Quentin Regestein

# **Family History and Your Health**

#### **To What Degree?**

People find it difficult when they start talking about their relationships to family members. What degree the relative is in relationship to you is important because the closer the relative is, the greater is your risk. The following information will help clear up some of these terms. It helps to think of relatives in steps:

First degree relatives — are one step away from you. They include parents, children or siblings.

Second degree relatives — are two steps away from you. They include half-siblings, grandparents, aunts, uncles and grandchildren.

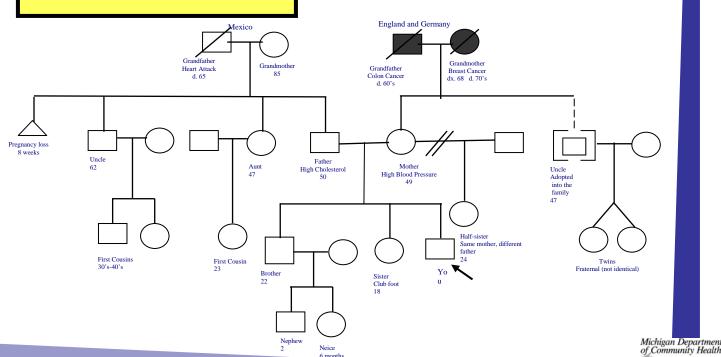
Third degree relatives — are three steps away from you and include first cousins.

# A Picture is Worth..... YOUR HEALTH!

Family health histories are often better understood when they are drawn out as a pedigree (or family tree). Diagrams are more easily referenced and relationships are much clearer in a "picture". Below are the standard symbols used in a pedigree along with a sample family health history to help you get started.

Standardized Pedigree Symbols and Relationships

male
female
Notes person initiating the family health history (you)
Affected
Deceased
Divorced





#### **Words to Know**

Passive Smoke - Also called secondhand smoke. is smoke in the environment someone is exposed to involuntarily. There are two kinds:

- 1)Side stream smoke released from burning tobacco, such as the end of a cigarette,
- 2) Main stream smoke exhaled by a person who

Affected - The individual diagnosed with a condition.

#### **Questions to ask**

- 1. Has anyone in your family been diagnosed with lung cancer?
- 2. What is their relationship to you?
- 3. At what age were they diagnosed?
- 4. Did they smoke? How much/how long?

#### **World No Tobacco Day**

**May 31** 

For more information visit the World No Tobacc web site listed below.















#### Resources





www.MIGeneticsConnection.org



www.lungusa.org (American Lung Association)



www.wntd.org (World No Tobacco Day)



Quitting isn't easy. For help in quitting smoking contact the numbers below and keep trying!





1-800-480-7848 - Michigan Tobacco **Quit Line** 





1-800-557-5666—For a FREE Smoker's Quit Kit, Expectant Mother's Quit Kit, and Smoking Around Children brochure





















# Spotlight on: Lung Cancer

5,680 Michigan residents died from lung cancer in 2003<sup>1</sup>. Lung cancer is the leading cause of cancer deaths in both men and women across the United States with 172,570 new cases and 163,510 deaths estimated in 2005 (American Cancer Society). Lung cancer is very difficult to diagnose early as there are no symptoms initially in the disease. If it is found early on, it is usually because the individual went to their health care provider for other concerns. There are several factors that increase your risk for getting lung cancer.

- ⇒ SMOKING (stopping smoking can reduce your risk of lung cancer by as much as 50%)
- ⇒ A family history of lung cancer
- ⇒ A diet low in fruits and vegetables
- ⇒ Certain environmental hazards such as asbestos. and radon
- ⇒ Air pollution

About 80-90% of all lung cancers are due to smoking. Stopping smoking is the best thing you can do to lower your risk. But, recent research has shown that 10% of lung cancers are in non-smokers, indicating there are other factors, including genetics, that are involved. Research also shows lung cancer can run in families.

#### A First Hand Look at Secondhand Smoke

Children with one or two parents who smoke are more likely to become smokers themselves. And even if they don't become smokers, a child or non-smoking spouse's risk of getting lung cancer increases by 24% due to exposure to passive smoke<sup>2</sup>. Passive smoke also leads to an increase in acute and chronic middle ear infections and asthma in children.

#### **Protect yourself and your family!**

#### References:

- 1985-2003 Michigan Resident Death Files, Vital Records, Michigan Department of Community Health
- <sup>2</sup> Action on Smoking and Health, www.ash.org.uk

#### "Genes draw your roadmap, but you still chart your course....."

-Jane E. Brody, New York Times, Feb. 25, 2002



For more information, please contact the Public Health Genomics Program by e-mail: genetics@michigan.gov or call toll-free: 1-866-852-1247

Michigan Department of Community Health March 2005–Vol. 2, No. 1

# **Family History and Your Health**

#### **March** is

#### **Colorectal Cancer**

#### **Awareness Month**

Colorectal cancer, including cancer of the bowel and rectum, is the second leading cause of cancer related death in the United States. In 2002, nearly 2000 Michigan citizens died from colorectal cancer. It is projected that there will be 56,290 deaths in the U.S. from colorectal cancer in 2005 (American Cancer Society). Because there is a link between family history and colorectal cancer, knowing your family history of the disease is important. Even if you have a family history of colorectal cancer, you may be able to prevent the disease with early screening. For more information on colorectal cancer go to

www.cancer.org.

## Words to Know

**Genes**– The basic unit of hereditary information that is the physical basis for transmitting characteristics from one living being to another.

**Genetics-**The study of the way traits are passed down from one generation to another.

**Genomics-** The study of all the genes and how they interact with each other and the environment.

**Chronic Disease-**A disease that lasts a long time or recurs often.



#### Back to the Basics

Advances in genetics are happening at such a rapid rate that it is hard to keep up with all of them. In spite of all this science and discovery, one of the best tools to assess risk for a disease is still picking up a piece of paper and a pencil and recording your family health history.

# What does your family have to do with your health?

Family members share genes, behaviors, lifestyles, ethnicity, traditions, cultures, religions, social supports, stress and environment. A person's family health history reflects the outcomes of all these influences. The family health history also holds important clues to current and future health risks.

#### So where do you start?

Start today with your immediate family's health history. The active participation and cooperation of your family is essential to collecting accurate information. Possible places to gather information are: family reunions, holiday celebrations, graduations, weddings, vacations or other family parties. Other places to look for information are baby books, family bibles, military records, old letters, obituaries or death certificates. Sharing medical information may not be very easy for some people, so respect for those who do not wish to share is important. Your family member may have important reasons for not wanting to share that information.

Michigan Department of Community Health



M DCH
Jennifer M. Granholm, Governor



# What do I do with all this information?

If you identify family members with a chronic disease there are three key points to remember:

- 1. What is their relationship to you?
- 2. What was their age of onset (when the disease began)? Did the disease appear at a typical age or occur earlier than expected?
- 3. How many other family members have the same condition?

Take this information to your doctor at your next visit. Your doctor may consider other disease risk factors and recommend screening and lifestyle changes based on the information you give him/her. Remember to keep your family history updated and pass it on to your children. They will thank you for it!

# Let's Go Surfing!! www.MIGeneticsConnection.org www.hhs.gov/familyhistory www.nci.nih.gov/cancertopics/ prevention-genetics-causes/ colon-and-rectal http://www.cancerindex.org/ clinks2b.htm For more reading ideas on Family History and Genetic Conditions visit: www.nsgc.org/resources/amazon\_books.asp

#### What is Early Onset?

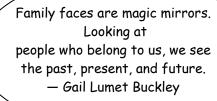
The age at which your relative was diagnosed with disease is an important factor when assessing your risk. If the onset of the disease occurred at a younger age than usual it increases your risk. When preparing your family history it is important to note the current age of your affected family member. The age when a disease was diagnosed and the age of death are also important. The following is a guideline for what may be considered "early onset" when compiling your family history:

Breast Cancer before age 50
Colon Cancerbefore age 50
Prostate Cancerbefore age 60
<b>Stroke before age 60</b>
Heart Diseasebefore age 55 for men
before age 65 for women
Kidney Diseasebefore age 50
Dementiabefore age 60
High Blood Pressurebefore age 40
Blood Clots in legs/lungsbefore age 40
Sudden Unexplained Deathbefore age 40
-



# Some other clues to look for in your family history that may increase your risk include:

- The same disease in more than one close relative
- Diseases that do not usually affect a certain gender (for example, breast cancer in a male)
- Certain combinations of diseases running in a family (for example breast and ovarian cancer, or heart disease and diabetes).



For more information, please contact the Public Health Genomics Program by e-mail: genetics@michigan.gov or call toll-free: 1-866-852-1247

Michigan Department of Community Health
November 2004 – Vol. 1, No. 1



### Thanksgiving is Family History Day!

Thanksgiving 2004 will mark the first annual National Family History Day. Thanksgiving is a time when families often gather together to celebrate the traditional start of the holiday season. Family gatherings are a good time to talk with relatives about medical histories. "My Family Health Portrait" provides a way to record this important information. Remember to update the information on a routine basis-perhaps at Thanksgiving every year! Please share this information with your health care provider and entire family.

# Family History and Your Health

# US Surgeon General Launches Family Health History Campaign

United States Surgeon General Dr. Richard H. Carmona has launched a national initiative to encourage ALL Americans to learn more about their family health history. By tracing the illnesses of your parents, siblings, grandparents, and other blood relatives, the family health history can help predict chronic diseases for which you and your family may be at risk. Your doctor can help you plan your care to include screening and prevention measures based on the information you collect.



A new tool has been developed to help collect and organize your family health information, called "My Family Health Portrait". It can help identify common diseases that may run in your family. Copies are available in English and Spanish. The website also includes common questions and answers about the importance of family history. This tool can be downloaded and installed on your home computer from <a href="http://www.hhs.gov/familyhistory">http://www.hhs.gov/familyhistory</a>. Printed copies are also available.

#### What is a Family Health History?

Family health history refers to health information about you and your close relatives. Family history is an important risk factor for chronic diseases, like heart disease, diabetes, stroke, some cancers, and other conditions that may run in families.

To order by phone call 1-888-8-PUEBLO and ask for "My Family Health Portrait". Specify #645M-English or #808M- Spanish. To order by mail, write to:

My Family Health Portrait Pueblo, CO 81009

In addition to the Office of the U. S. Surgeon General, other Health & Human Services agencies involved in this initiative include the National Human Genome Research Institute (NHGRI), the Centers for Disease Control and Prevention (CDC), the Agency for Healthcare Research and Quality (AHRQ), and the Health Resources and Services Administration (HRSA).

#### A Special Message from Michigan Surgeon General, Dr. Kimberlydawn Wisdom

Taking care of ourselves by eating well and being physically active is important for everyone. But for some of us, it's even more important. If you have a family history of heart disease, diabetes, stroke, high cholesterol, or high blood pressure, something as simple as brisk walking 30 minutes a day and following a healthy low fat diet could prevent you from ever getting the condition or delay your getting it.

Please, make it a point this holiday season to talk to one or more of your relatives about the health issues that run in your family

then, talk to your doctor about these issues also. Don't leave your health to chance. Make health your choice! For ideas and help on moving more, eating better and not smoking, look for the new Michigan Steps Up website, coming soon to www.michiganstepsup.org

#### Suggested Reading

Your Genetic Destiny: Know Your Genes, Secure Your Health, Save Your Life by Aubrey Milunsky



Is It In Your Genes? The Influence of Genes on Common Disorders and Diseases That Affect You and Your Family by Philip R. Reilly

The Practical Guide to the Genetic Family History by Robin L. Bennett

For more reading ideas on family history and genetic conditions, visit

www.nsgc.org/resources/amazon\_books.asp

# What health conditions are important to collect and record?

Of the ten leading causes of death in Michigan, at least nine would be important to collect and record in your family health history. These include heart disease, cancer, stroke, lung disease, diabetes, Alzheimer's, kidney disease, and serious infections like pneumonia. It is important for family members to share information about these and other health conditions with each other. The list of other possible conditions is very long, and includes high blood pressure, asthma/allergies, mental illness, seizures/ epilepsy, blood disorders, osteoporosis, sudden unexplained deaths, birth defects, developmental delay, muscular disorders, early childhood deaths, stillbirths, two or more miscarriages, or known genetic syndromes. A record of habits such as smoking, heavy alcohol use, poor diet, and substance abuse can also be helpful.

# Why is knowledge of your family health history important?

Family members share common habits, lifestyles, and environments. They also share traits that are passed through the generations, which is why family members often resemble one another. The family tree, and health history, reflect all of these shared influences. Lifestyle changes may

be especially important to you if your family health history shows a higher risk for certain chronic diseases.



#### Let's go surfing!

www.hhs.gov/familyhistory www.cdc.gov/genomics/public/famhist.htm

www.MIGeneticsConnection.org

www.nsgc.org/consumer

www.geneticalliance.org, click genetic resources, then family history tools

www.generationalhealth.com

"Genes draw your road map, but you still chart your course" -Jane E. Brody, New York Times,

Feb. 25, 2002

#### Food for Thought

How important do you think knowledge of your family's health history is to your personal health?



#### at Thanksgiving

Have you ever actively collected health information from your relatives for purposes of developing a family health history?

According to a recent survey\*, most people know that family history is important to health. While 96% of Americans believe knowing their family history is important, only **one-third** have tried to gather and write it down. Let's try to increase the number of Americans who have collected their family health history! Please start to gather your family health history this holiday season.

The State of Michigan will also have a chance to respond to these two questions. In 2005, a phone survey, called the Behavioral Risk Factor Survey (BRFS), will ask these two questions of 4000 Michigan households. Stay tuned to find out how Michigan compares to the national survey results!

\* 2004 HealthStyles Survey. Results reported in MMWR, 53(44);1044-1047/ November 12, 2004. Awareness of Family Health History as a Risk Factor for Disease — United States, 2004. <a href="https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5344a5.htm">www.cdc.gov/mmwr/preview/mmwrhtml/mm5344a5.htm</a>



Michigan Department of Community Health



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